eMARSGR02
Grants Data Collection

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eMARS Grants Data Collection

1 – Orientation

This course will introduce you to the tools and procedures that will be used to collect the data necessary to set up grants in eMARS. Since appropriate data setup depends on some understanding of eMARS Cost Accounting tables, an overview of those tables is provided as well.

Prerequisites

You should have completed the following courses before continuing:

- eMARSGR01 – eMARS Federal Fund Data Cleansing

Learning Objectives

At the conclusion of this session, you will be able to:

- Begin to identify an appropriate crosswalk for your MARS grants elements to eMARS
- Use the Major Program Structured (MPS) Access database as a data collection tool for eMARS grants data

2 – eMARS Cost Accounting

The functionality in eMARS used for grants maintenance is called "Cost Accounting". It is similar to the Project Billing module in MARS in that it allows for the establishment of grant agreements, identification of costs and revenues by grant, and automated reimbursement of grant costs.

In order to appropriately identify the crosswalk of elements from MARS to eMARS for your grants, some understanding of this functionality is required. Please refer to the separate document entitled "Overview of eMARS Major Program Structure" for an initial look at the tables related to this functionality. A better understanding of this functionality can be gained by testing (as described later in this document) or training.

Should you have questions concerning any of this information, feel free to contact a Cost Accounting member of the eMARS Functional Team (502-573-6806):

- John Bailey   x3494   johnd.bailey@ky.gov
- Fred Hill   x3462   fred.hill3@ky.gov
- Diana Holberg   x3496   diana.holberg@ky.gov

3 – eMARS Data Collection Overview

Work Plan

Due Date	Task
*12/9/2005	1. Submit T_GrantsToConvert table containing active grants.
*12/15/2005	2. Receive MPS database with crosswalk table (to include 2.x data) and the 15 Major Program Structure tables required for eMARS.
*12/31/2005	3. For grants that will not be converted, dispose of cash balances.
01/06/2006	4. Return initial crosswalk table.
01/30/2006	5. Return initial Major Program Structure tables (including grant agreement amounts) for UAT testing purposes.
01/30/2006 – 03/31/2006	6. Schedule tests in UAT to confirm/correct Major Program Structure tables.
*03/31/2006	7. Agencies submit Major Program Structure tables (including updates to crosswalk and grant agreement amounts) for Production data load.
*03/31/2006 – 05/15/2006	8. Keep track of any new grants **and maintain crosswalk data in MPS**.
*05/15/2006	9. Establish new grants from 3/31 – 5/15 directly in eMARS.
*06/15/2006	10. For grants that will be converted, record corrections to "out-of-balance" conditions, and clean up cash and related nominal balances.
*06/30/2006	11. Submit final crosswalk table.

*Asterisks indicate required tasks. Other tasks are beneficial and recommended, but optional.

Work Plan Instructions

Submitting Active Grants Data

In the first session offered for eMARS Grants Data conversion, you were instructed to build a table of active grants to be converted from MARS to eMARS as part of initial data cleansing activities. The next steps of eMARS data collection will build upon this initial table.

By December 9, 2005, you should submit this data to the eMARS Functional Team. As described in the first session, this is accomplished by entering the data in the T_GrantsToConvert table in the ProjCash3 Access database and sending that table to Diana Holberg (Diana.Holberg@ky.gov) with copies to your AIL and Connie Camden (Connie.Camden@ky.gov).

Obtaining the MPS Database

The Major Program Structure (MPS) database is a Microsoft Access© database constructed to imitate the eMARS Cost Accounting tables. This tool will facilitate collection of required eMARS grants data as well as familiarize you with the structure of the Cost Accounting tables in eMARS.

Shortly after you submit your T_GrantsToConvert table, you will receive via email a copy of the MPS database as a .zip folder. Follow these steps to save the database on a network server:

1. Detach and save the .zip folder. From Microsoft Outlook©, this is done by right-clicking on the attachment and selecting **Save as…**, then choosing a location for the .zip folder.

2. Open the .zip folder by locating it where you saved it and double-clicking its icon. You will see two files: MPS.mdb (an Access© 2000 file) and MPS_97.mdb (an Access© 97 file).

3. Copy the appropriate file by right-clicking its icon and selecting **Copy**.

4. Navigate to the location on the network server where you wish to save the MPS database. Right-click and select **Paste**. This will save a copy of your MPS database.

Completing the MPS Database

It is recommended that you identify an "owner" for this database who will enter all data, or structure data entry tasks such that only one user at a time is entering data. In any case, be sure to store the database on a network server so that regular backups are made.

For each grant, entries must be made in the crosswalk table prior to completing the eMARS tables. This is to ensure that the crosswalk data will be complete. For this reason, it is suggested that you determine the Major Program Structure for your grant first, then make the appropriate crosswalk entries, and finally complete the rest of the tables.

On each form in MPS, two buttons have been included to assist with data entry: **Save Record** and **Refresh Dropdowns**. If you have any difficulty with values missing from dropdown lists, try using these buttons after you enter data.

It is suggested that you submit a completed crosswalk table to the eMARS Functional Team for review by 1/6/2006 – prior to completing the remainder of the tables. This will improve the chances of catching any oversights or errors in a Major Program Structure before you spend too much time on data entry.

Submitting the MPS Database

When the time comes to submit all or part of the MPS data to the eMARS Functional Team, follow these steps to email it to the appropriate people:

1. Locate the MPS database file on your network server. Make a copy of it named ###MPS.mdb, where ### is your eMARS Department code.

2. Open the ###MPS.mdb file. From the **Tools** menu, select **Database Utilities : Compact and Repair Database…** to reduce the size of your database. You may be prompted to re-open the database. Once this is done, close Microsoft Access©.

3. Right-click on the icon for the ###MPS.mdb file and select **Send to…**, then select **Compressed (zipped) folder**. You will see a zipped folder named ###MPS.zip appear containing a copy of your ###MPS.mdb file.

4. Note the size of the zipped folder. If it exceeds email limitations (usually 2,000 KB), contact the eMARS Functional Team to make arrangements for another method of submission.

5. Send the .zip file as an email attachment to Diana Holberg (Diana.Holberg@ky.gov) with copies to your AIL and Connie Camden (Connie.Camden@ky.gov).

4 – The MPS Database

Overview

Again, the Major Program Structure (MPS) database is a Microsoft Access© database constructed to imitate the eMARS Cost Accounting tables. (For a diagram showing the relationship of these tables to one another in eMARS, see the Appendix.)

The Major Program structure consists of four primary database tables

- **Major Program (MJPRG)** – Defines the highest level of the Major Program Structure.
- **Program (PROG)** – Defines the next lower level in the Major Program Structure.
- **Program Period (PPC)** – Defines inference periods for the Major Program Structure.
- **Funding Profile (FPRFLST)** – Used to define funding for the Major Program Structure. Three eMARS tables are combined in this form:
    - **Funding Profile,**
    - **Funding Priority,**
    - **Funding Line** (which consists of three database tables).

Eight optional rollup tables may be populated as needed for reporting purposes. Four tables exist for Major Program (class, category, group, type) and four for Program (class, category, type, group).

Four other database tables support Front End Split (FES) and the eMARS Reimbursement Offline Process:
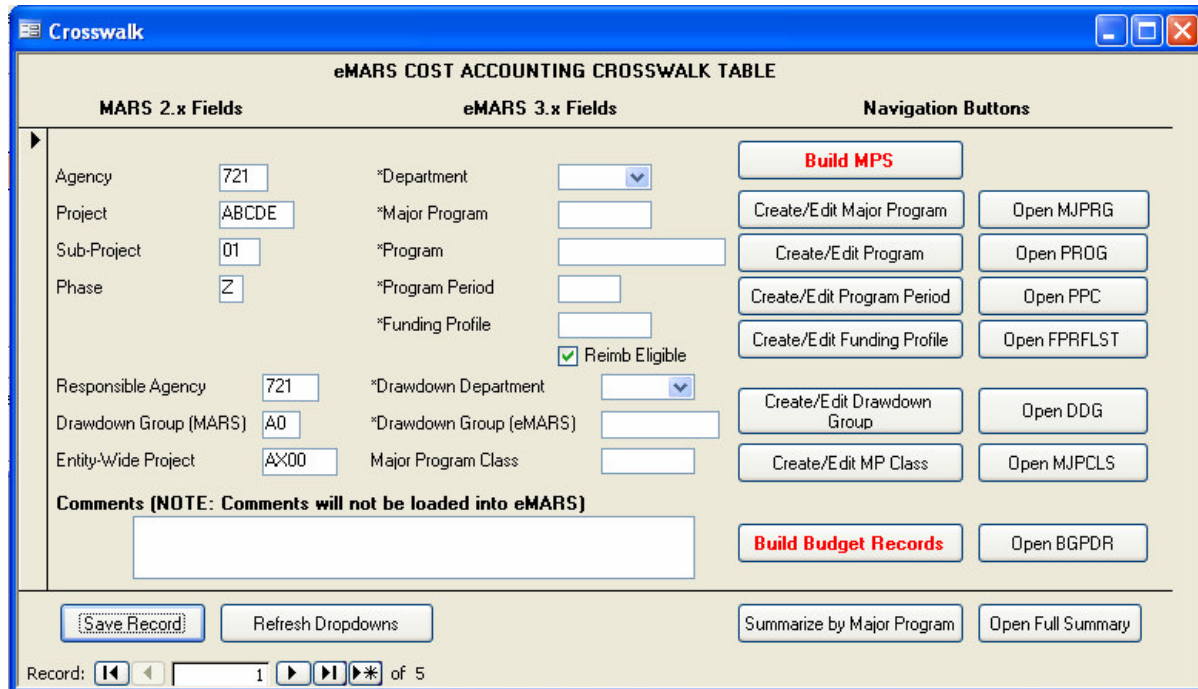
- **Drawdown Group (DDG)** – Groups Major Programs together for reimbursement purposes.
- **Funding Profile Inference (FPI4)** – Defines the inference for Funding Profile, including eligibility.
- **Reimbursable Budget (BGPDR)** – Defines the initial budget structures to be established in eMARS.
- **CMIA Setup (CMIA)** – Defines the Day of Clearance for CMIA-eligible grants and projects.

Forms are provided in the MPS database that are structured much like those in eMARS, and certain edits to data are included. Finally, there is a crosswalk table that also serves as a navigational menu.

Crosswalk Table

Two forms are provided for entry of crosswalk data on the Crosswalk table. They are called Crosswalk and Crosswalk Summary. Both display the same data, just organized in different formats. Crosswalk entries must be made for all grants.

Crosswalk Form

The Crosswalk form may be thought of as the central point of navigation through the MPS database.
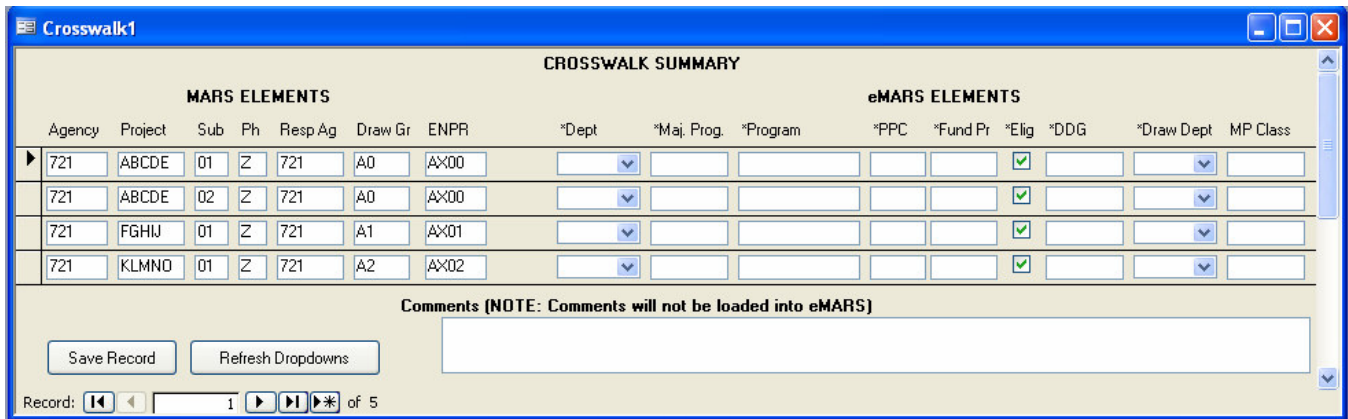
Existing Grants. When you receive your copy of the MPS database, entries will have already been made for your existing active grants showing MARS elements based on the data you submitted. For each existing record on this table, you must crosswalk the MARS string of elements to an eMARS string, as shown.

New Grants. For grants established between now and 6/30/2005, add new Crosswalk records but leave the MARS fields empty.

Refer to the "Overview of eMARS Major Program Structure" document for descriptions of these fields and their use. Note that with the exception of *Major Program Class*, all eMARS elements are required, as indicated by an asterisk (*) at the beginning of the field label. Use the Comments field to document anything unusual, such as combining multiple Sub-projects into a single Program, or breaking out a single Sub-project into multiple Program Periods.

Again, it is recommended that you complete the Crosswalk table before using the Navigation Buttons to make entries in the other tables. To facilitate copying and pasting data element values, the Crosswalk Summary form is provided. It is opened by clicking the **Open Full Summary** button at the lower right of the form.

Crosswalk Summary Form

Note: If your monitor is not configured to show all of the data, you may have to use a scroll bar to see the rightmost fields.

The Crosswalk Summary form allows you to see all of the records on the Crosswalk table in a columnar format. On this form, you can cut and paste individual data elements from one record to another.

Tip: Use of Both Forms

Since grants are identified by the Major Program code, the **Summarize by Major Program** button on the Crosswalk form allows you to view all records for a single Major Program. This can be used to facilitate entry of other fields, as follows:

1. On each of the records representing your grant, fill in the Department and Major Program fields using the Crosswalk form or the Crosswalk Summary form.

2. Locate one of the records for your Major Program using the Crosswalk form.

3. Click the **Summarize by Major Program** button.

4. The Crosswalk Summary form will open to display only the records for your Major Program. Here you can more quickly enter the other fields, and cut and paste as desired.

Navigation Buttons

Navigation buttons are included on the Crosswalk form to assist you in entry and correction of data in the eMARS tables.

Build MPS button. *This button can be used only one time.* When you believe your Crosswalk table is populated, this button will create records in the Major Program (MJPRG), Program (PROG), Program Period (PPC) and Funding Profile (FPRFLST) tables based on Crosswalk entries and default values. You will still have to review and change every record on those tables, but this will save you on data entry time. After the first use of this button, it will have no effect and any additions or changes you make to the Crosswalk must be made manually to the MPS tables.

Create/Edit buttons. After records are entered in the eMARS tables, these buttons will open the form for the eMARS table to display only the record(s) relating to the current Crosswalk record. (In other words, the data on the form will be filtered by the eMARS elements on the current Crosswalk record.)

Open buttons. These buttons will open the form for the eMARS table to display all records on that table. (In other words, no filter will be applied.)

Build Budget Records. *This button must be used with care.* After you have populated the Crosswalk and the Funding Profile (FPRFLST) tables, this button will build records in the Funding Profile Inference (FPI4) and Reimbursable Budget (BGPDR) tables. You will then need to review those tables and add agreement amounts for your budgets. This will be further explained later in this document.
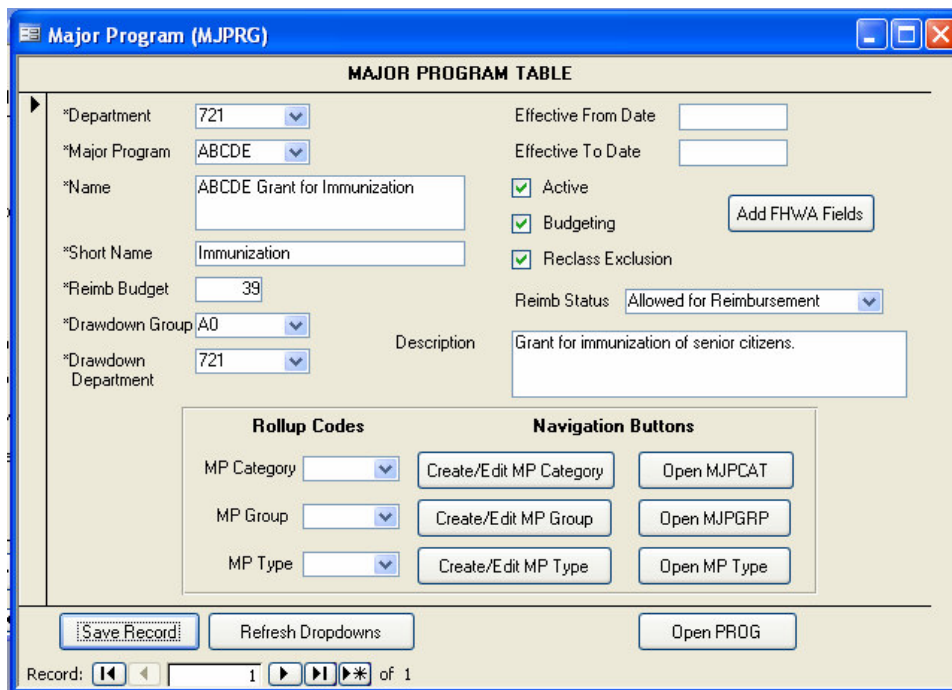
Primary eMARS Tables

There are four forms in MPS to represent the primary tables of the Major Program Structure:

- **Major Program (MJPRG)** – Defines the highest level of the Major Program Structure.
- **Program (PROG)** – Defines the next lower level in the Major Program Structure.
- **Program Period (PPC)** – Defines inference periods for the Major Program Structure.
- **Funding Profile (FPRFLST) –** Used to define funding for the Major Program Structure.

Again, *one time only,* the **Build MPS** button on the Crosswalk form can be used to generate entries in these tables. Those entries must then be edited via their corresponding forms. The forms are best opened using the **Create/Edit** and **Open** navigation buttons on the Crosswalk form.
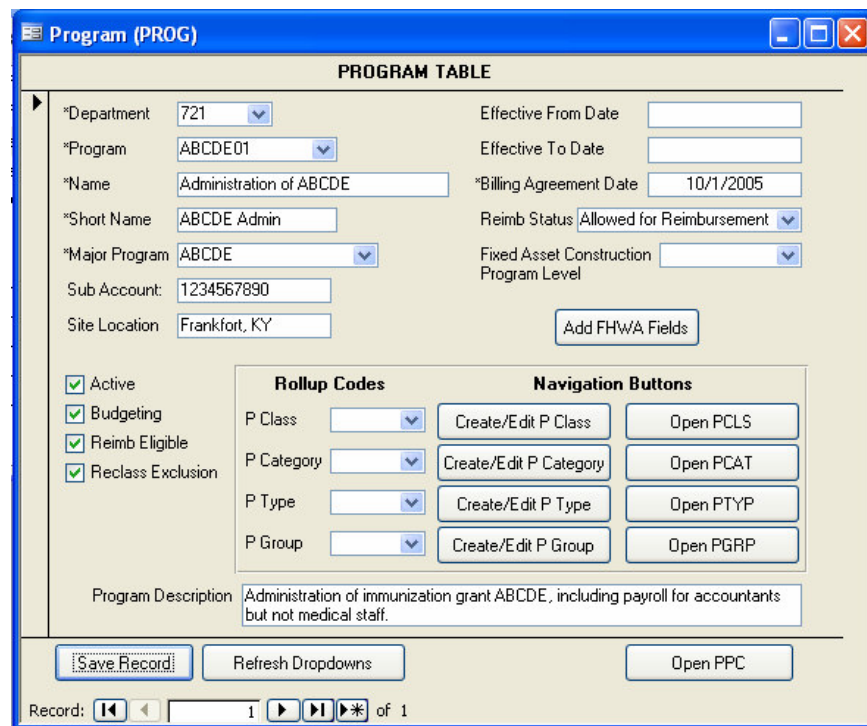
Major Program (MJPRG) Form

Note that all fields on the left side are required, as indicated by an asterisk (*) at the beginning of the field label. *Reimb Budget* will default to "39" (the eMARS Reimbursable Budget Structure). *Effective From Date* and *Effective To Date* may be entered, but this is not recommended since errors related to these dates are not overrideable. The *Active*, *Budgeting*, and *Reclass Exclusion* flags will all default as shown, as will *Reimb Status*.

There are additional fields on the Major Program (MJPRG) table in eMARS relating to federal highway projects. The fields may be entered by clicking the **Add FHWA Fields** button.

Rollup codes are optional and can only be entered after they are established on their own respective tables. See the "Rollup Codes" section of this document for details.

Note that the **Open PROG** button at the bottom of this form can be used to navigate to the next form in the Major Program Structure.

Program (PROG) Form

Note the required fields indicated by an asterisk (*) at the beginning of the field label. *Effective From Date* and *Effective To Date* may be entered, but this is not recommended since errors related to these dates are not overrideable. The *Active*, *Budgeting*, *Reimb Eligible* and *Reclass Exclusion* flags will all default as shown, as will *Reimb Status*.

There are additional fields on the Program (PROG) table in eMARS relating to federal highway projects. The fields may be entered by clicking the **Add FHWA Fields** button.

Rollup codes are optional and can only be entered after they are established on their own respective tables. See the "Rollup Codes" section of this document for details.

Note that the **Open PPC** button at the bottom of this form can be used to navigate to the next form in the Major Program Structure.

Program Period (PPC) Form

Note the required fields indicated by an asterisk (*) at the beginning of the field label. On this form, *Inf Date - From* and *Inf Date - To* must be entered, since the purpose of this table is to identify the inference dates for the Program Period. The *Active* and *Budgeting* flags will default as shown, as will *Reimb Status*.

There are additional fields on the Program (PPC) table in eMARS. The fields may be entered by clicking the **Add FHWA Fields** button, however, it is recommended in this case that they be entered on the Funding Profile (FPRFLST) table instead.

Note that the **Open FPRFLST** button at the bottom of this form can be used to navigate to the next form in the Major Program Structure.

Funding Profile (FPRFLST) Form

Note: The actual form in MPS may differ in appearance from what is shown here.

Required fields are indicated by an asterisk (*) at the beginning of the field label. This form is organized into three sections, representing the three forms that comprise the Funding Profile in eMARS:

      - **Funding Profile,**
      - **Funding Priority,**
      - **Funding Line**

These forms were combined for data collection so that data could be more easily viewed. Be sure that the Funding Profile fields you enter are the same across all records entered for that Funding Profile. Similarly, be sure that the Funding Priority fields you enter are the same across all records entered for that Funding Priority.

Funding Profile fields. *Effective From Date* and *Effective To Date* may be entered, but this is not recommended since errors related to these dates are not overrideable. The *Active*, *Budgeting*, *Reimb Eligible*, *Overflow Exclusion* and *CMIA Interest* flags will all default as shown, as will *Reimb Status*.

Funding Priority fields. *Funding Priority* values should be entered in increments of 10 (i.e., 10, 20, etc.). *Funding Priority* 99 should be used to capture overflow, and *Overflow Priority* should only be checked on records for that priority. *Reimb Status* will default as shown.

Funding Line fields. *Funding Line* values must be entered in increments of 1 (i.e., 1, 2, 3, etc.). The *Reimb %* amounts for your Funding Lines must total 100% for the Funding Priority. It is not recommended that *Max Reimb Amt* be used – this controls the maximum amount you can receive per reimbursement period (e.g., per week) and has nothing to do with your *Agreement Amount*. You must enter Fund codes and a Revenue Source code to facilitate Front End Split (FES). All other Chart of Account codes are optional on Funding Lines. *Letter of Credit* is used for Negative Draw Prevention. If your payment system will not accept negative amounts, you will need to learn about this functionality by testing your data as described in a later section of this document.

eMARS Rollup Tables

There are four rollup codes for the Major Program code:

- **Major Program Class (MJPCLS)** – Maps the MARS Entity-Wide Project Number.
- **Major Program Category (MJPCAT)**
- **Major Program Group (MJPGRP)**
- **Major Program Type (MJPTYP)**
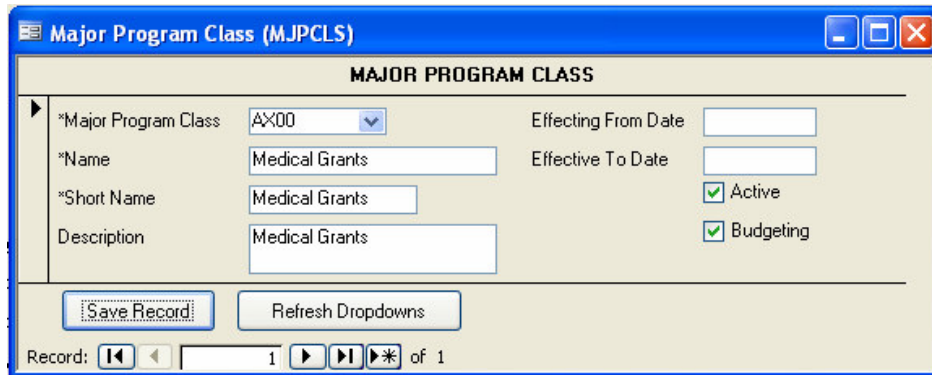
Similarly, there are four rollup codes for the Program code:

- **Program Class (PCLS)**
- **Program Category (PCAT)**
- **Program Type (PTYP)**
- **Program Group (PGRP)**

All of these codes are optional in eMARS. With the exception of Major Program Class (MJPCLS), all of these codes are entered in the same way. Major Program Class is handled differently because it is specified on the Crosswalk form rather than on the Major Program form.

Major Program Class (MJPCLS) Form

The Major Program Class (MJPCLS) form is opened by clicking a navigational button on the Crosswalk form.

You will only be able to enter a Major Program Class code on this form if there is already an entry on the Crosswalk for that code. The dropdown list may be used on this form to select the code, or the code may be typed in. Note that dropdown lists in MPS may contain duplicate values (e.g., one value for every record on the Crosswalk table).

As with all other forms, *Effective From Date* and *Effective To Date* may be entered, but this is not recommended since errors related to these dates are not overrideable.

Other Major Program Rollup Forms

The other forms for entry of Major Program rollup codes are opened by clicking a navigational button on the Major Program (MJPRG) form. Entries on the Major Program (MJPRG) form will only accept a code if it has already established on the corresponding rollup form.

Note that the two rollups that are not keyed by Department (Class and Category) will be issued on a first come, first served basis. Enter the codes you desire to use and if there are conflicts among these requests when data is submitted, you will be contacted to choose a different code.

Program Rollup Forms

The forms for entry of Program rollup codes are opened by clicking a navigational button on the Program (PROG) form. Entries on the Program (PROG) form will only accept a code if it has already established on the corresponding rollup form.

Again, note that the two rollups that are not keyed by Department (Class and Category) will be issued on a first come, first served basis. Enter the codes you desire to use and if there are conflicts among these requests when data is submitted, you will be contacted to choose a different code.

Other Tables

Three tables remain to be described:

- **Drawdown Group (DDG)** – Groups Major Programs together for reimbursement purposes.
- **Funding Profile Inference (FPI4)** – Defines the inference for Funding Profile, including eligibility.
- **Reimbursable Budget (BGPDR)** – Defines the initial budget structures to be established in eMARS.
- **CMIA Setup (CMIA)** – Defines the Day of Clearance for CMIA-eligible grants and projects.

Drawdown Group (DDG) Form

This form is accessed via a navigational button on the Crosswalk form. It functions like the primary eMARS forms in that entries can only be made for codes that exist on the Crosswalk table. If the **Build MPS** button is used on the Crosswalk form, initial entries will be made with default values that must be reviewed and corrected.

Funding Profile Inference (FPI4) Form

The Funding Profile Inference (FPI4) table can be populated using the **Build Budget Records** button on the Crosswalk form as described in the next section. FPI4 data is then manually maintained using the Funding Profile Inference (FPI4) form, which is opened by clicking the **Open FPI4** button on the Funding Profile (FPRFST) form.

Reimbursable Budget (BGPDR) Form

One of the last tasks you should do is enter budget amounts on the Reimbursable Budget (BGPDR) form. Here are steps that will save you a lot of time:

1. Make sure that your Crosswalk data is complete, including active grants from MARS as well as any new grants.

2. Make sure that your Funding Profile (FPRFLST) data is complete. Use the reports provided to review your funding profiles and make any necessary corrections.

3. Open the Crosswalk form and click the **Build Budget Records** button. You will be prompted for a default Agreement Amount value (enter $0.00 or any amount to be used to populate Agreement Amount on every record that is created). Records will be created on the Funding Profile Inference (FPI4) table and the Reimbursable Budget (BGPDR) table based on data in your Crosswalk and Funding Profiles. (Note that for Funding Profiles that are not marked *Active* and *Budgeting*, no entries will be generated.)

4. After the initial records are created, they must be manually reviewed and corrected. Additionally, for any new grants these tables must be manually updated. Use the **Open BGPDR** button on the Crosswalk form to access the Reimbursable Budget (BGPDR) form. Use the **Open FPI4** button on the Reimbursable Budget (BGPDR) form to open the Funding Profile Inference (FPI4) form.

Note: You may use the **Build Budget Records** button more than once, but keep in mind that it only appends records to FPI4 and BGPDR – it will not make updates to existing records. It is recommended that if you need to use the button more than once you delete all records from FPI4 and BGPDR first and rebuild them from scratch.

Entering Agreement Amounts on BGPDR

The *Agreement Amount* entered represents the amount available from the entity indicated by *Customer*. It is recommended that you specify <u>available</u> budget amounts in this field for eMARS conversion (rather than actual agreement amounts). Since the <u>available</u> amounts will not be known prior to July, 2006, you should make your best guess and plan to adjust your budgets once eMARS is live.

Note: Inception-to-date expenditure and revenue amounts will not be converted. Users who do not believe they can operate without seeing these amounts reflected on inquiry screens may make arrangements to provide the necessary data to adjust those screens. Note, however, that such conversion activities will impact your *Agreement Amounts* here, and will likely still require adjustments to your budgets once eMARS is live due to differences in data structures and functionality. If you have questions, contact the eMARS Functional Team.

CMIA Setup (CMIA) Form

Discussions of CMIA Setup are still underway as of the writing of this document. If you have grants that will use Average Clearance as the CMIA Funding Method, be aware that you will likely be asked to populate this table at a later date, and that in eMARS you will need to maintain this table.

Accessing MPS Forms Directly

If using navigational buttons is considered too cumbersome, forms can be accessed directly using the Database window (accessed by clicking the [icon] button in Microsoft Access©).
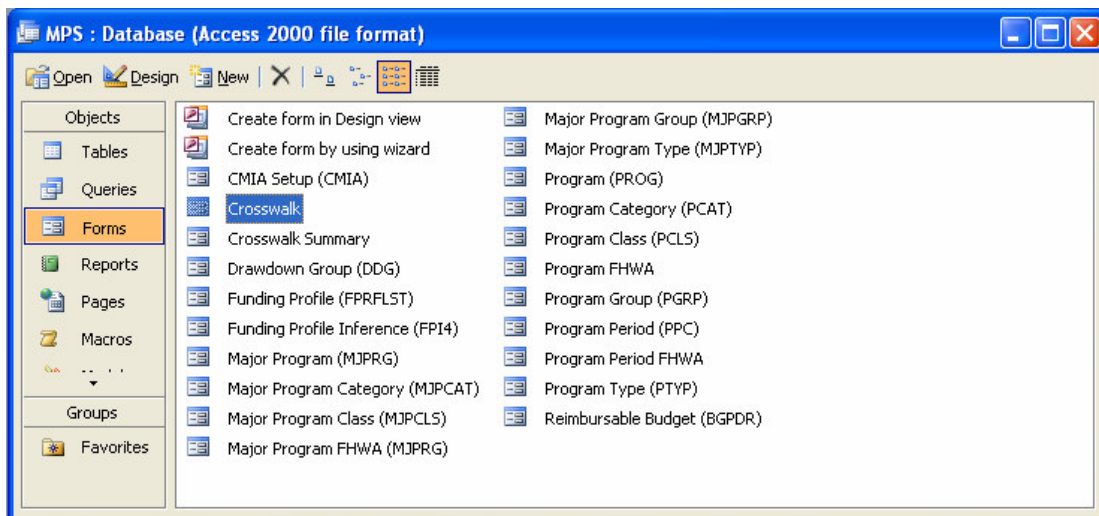
Standard Microsoft Access© toolbars should be used to add records, delete records, search, etc.

5 – When Data Entry is Complete

Testing Your Data

It is recommended that you contact the eMARS Functional Team to test at least part of your data in the eMARS User Acceptance Testing environment. This will allow you to see the documents that will be generated to record reimbursement of grant costs, as well as test other functionality and become familiar with using the Reimbursement Offline Process tables to locate costs that are in the process of reimbursement.

It is understood that your MPS data will not be complete for testing. You must populate the four MPS tables as well as FPI4 and BGPDR, but you may use default *Agreement Amounts* and minimal COA elements for testing purposes.

Tests may be scheduled if you submit your initial MPS database by 1/30/2006. Data submitted late will be handled as time permits. Tests may be conducted until 3/31/2006 in conjunction with User Acceptance Testing. Schedule tests by contacting a Cost Accounting member of the eMARS Functional Team (502-573-6806):

- John Bailey   x3494   johnd.bailey@ky.gov
- Fred Hill   x3462   fred.hill3@ky.gov
- Diana Holberg   x3496   diana.holberg@ky.gov

eMARS Glossary of Terms

Access to the eMARS Glossary of Terms can be found on the eMARS Website under Training "eMARS Glossary of Terms".

http://finance.ky.gov/internal/emars/

Closing Statement

Thank you for your cooperation in this data collection effort. We have structured this effort with your maximum participation in mind. By actively involving your staff in the activities described in this document, you will be better prepared for the transition to eMARS.

Appendix

The diagram below depicts the eMARS tables in the MPS database as they are related, as well as the Reimbursable Budget (BGPDR) document. There is also a Crosswalk table, not shown.